

# Spending On Mental Health And Substance Abuse Treatment, 1987–1997

Public payers picked up a growing share of the mental health/substance abuse treatment bill during 1987–1997.

by Tami L. Mark, Rosanna M. Coffey, Edward King, Henrick Harwood, David McKusick, Jim Genuardi, Joan Dilonardo, and Jeffrey A. Buck

**ABSTRACT:** This paper is the result of an ongoing effort to track spending on mental health and substance abuse (MH/SA) treatment nationwide. Spending for MH/SA treatment was \$85.3 billion in 1997: \$73.4 billion for mental illness and \$11.9 billion for substance abuse. MH/SA spending growth averaged 6.8 percent a year between 1987 and 1997, while national health expenditures grew by 8.2 percent.

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APPROXIMATELY 28 PERCENT of the U.S. adult population suffers from a mental health or substance abuse (MH/SA) disorder during the course of a year.<sup>1</sup> Of the ten leading causes of disability worldwide in 1990, five were MH/SA conditions.<sup>2</sup> Given the prevalence of MH/SA-related illness and death, it is important to know how much the United States invests in treatment. Moreover, the rapid advances in treatment technologies and dramatic changes in the organization and financing of the MH/SA treatment system require that this investment be tracked over time.

This paper presents estimates of national MH/SA spending in 1987 and 1997, by payer and type of service, using the most recently available data. We adjust the estimates to enable direct comparisons with total national health care spending. These figures replace and supplement prior spending estimates for 1986–1996 produced by this team because they are based on more recent data and improved methods.<sup>3</sup>

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*Tami Mark and Rosanna Coffey are with the MEDSTAT Group in Washington, D.C. Edward King, David McKusick, and Jim Genuardi are with the Actuarial Research Corporation, in Columbia, Maryland, and Annandale, Virginia. Henrick Harwood is with the Lewin Group in Falls Church, Virginia. Joan Dilonardo and Jeffrey Buck are with the Substance Abuse and Mental Health Services Administration (SAMHSA) in Rockville, Maryland.*

## Study Methods

We used two basic methods to estimate spending on MH/SA treatment depending on provider or service type. The first method relied on the Substance Abuse and Mental Health Services Administration's (SAMHSA's) national surveys of specialty MH/SA organizations. These surveys, the Inventory of Mental Health Organizations (IMHO) and the Uniform Facility Data Set (UFDS), report total revenues by provider, payer source, and diagnosis. Services captured on both surveys were unduplicated. The most important data gap was the lack of data about MH specialty facility care for 1995–1997.<sup>4</sup> Missing revenue data and outliers were imputed or extrapolated.<sup>5</sup>

The second basic method carved out spending on MH/SA treatment from the Health Care Financing Administration's (HCFA's) National Health Accounts (NHA). The NHA captured several services and providers that the UFDS or IMHO did not, including spending for general hospital nonspecialty units, physicians, other professionals, retail prescription drugs, nursing homes, and home health agencies. Estimates for these services are based on HCFA's estimates of total spending by provider and payer. A proportion of that total spending was allocated to MH/SA using numerous data sets, mainly public-use, nationally representative, provider-based survey data such as the National Hospital Discharge Survey and the Healthcare Cost and Utilization Project, Nationwide Inpatient Sample. Allocations to MH/SA typically involved first determining the proportion of total service use (for example, inpatient days) that was for MH/SA disorders, then adjusting for differences in average charges, cost sharing, and discounts between MH/SA and all other diagnoses.

We integrated the two methods by adding up spending amounts by provider and payer after accounting for duplication across data sources. Although the NHA captures spending for care provided in schools, our estimates could not fully capture these costs. Also, we did not include spending on research and facility construction.

To define MH/SA disorders, we relied on diagnostic codes classified in the *International Classification of Diseases*, Ninth Revision, Clinical Modification (ICD-9-CM) as “mental disorders” (codes in sections 290 through 319). These codes exclude cerebral degenerations (such as Alzheimer's disease, ICD-9 331.0). After consulting with a panel of MH/SA experts, we also excluded several other codes related to dementia as well as developmental delays and tobacco abuse.<sup>6</sup> Two additional diagnostic codes related to MH/SA disorders during pregnancy were added (648.3 and 648.4). Finally, a few ICD-9-CM V codes were included. V codes indicate that the coded problem is not the current problem being treated but is influencing the

treatment of another disorder.<sup>7</sup> The allocation to MH/SA was based on primary diagnoses. Clearly, the spending estimates would be higher if secondary diagnoses were also captured; however, this was outside the scope of our study.

The diagnostic categories selected generally reflect what payers consider to be MH/SA conditions. They exclude costs not directly related to treatment, such as those stemming from lower productivity and drug-related crimes. They also exclude spending on non-MH/SA conditions that are caused by MH/SA problems, such as liver cirrhosis. The exclusion of dementia differs from some previous spending estimates by other researchers; however, since those prior estimates were made, a separate specialty care system for dementia has evolved. In addition, dementia is not typically singled out for reduced insurance coverage as are other MH/SA disorders.<sup>8</sup>

Retail prescription drugs is the only service that was not allocated to MH/SA based on primary diagnoses. Because national data on prescriptions do not include the diagnosis that led to the prescription, expenditures were considered for MH/SA treatment if the medication's primary indication was an MH/SA disorder.<sup>9</sup>

## Study Results

■ **Spending in 1997.** In 1997, \$85.3 billion was spent on MH/SA treatment in the United States. The largest share of this (\$73.4 billion) went to treating mental illness, and the remaining \$11.9 billion was for substance abuse (Exhibit 1). Clearly, MH/SA spending is a major category of health spending. A recent study of spending by disease category found that MH/SA spending is exceeded only by spending on diseases of the circulatory system (\$127.8 billion) and on digestive system diseases (\$86.7 billion).<sup>10</sup>

Nearly 60 percent of MH/SA spending was for hospitals and independent practitioners (Exhibit 1). More than half of the funding for MH/SA treatment in 1997 came from public-sector payers (Exhibit 2). If one allocates 60 percent of Medicaid spending to the federal government and the remaining 40 percent to state/local government, federal spending and state/local MH/SA spending were about equally divided.

Because 86 percent of expenditures on MH/SA were for mental health treatment, the patterns of spending on MH/SA are driven by mental health spending (Exhibit 1). Almost three-fourths of substance abuse spending was for care in hospitals or specialty substance abuse centers. The other provider categories each accounted for less than 12 percent of total substance abuse spending; psychiatrists, only 2.4 percent.

Substance abuse expenditures were more heavily weighted to-

**EXHIBIT 1****Estimated Mental Health And Substance Abuse (MH/SA) Spending, By Type Of Provider And Diagnosis, Millions Of Dollars, 1987 And 1997**

Provider type	MH/SA		Mental health		Substance abuse	
	1987	1997	1987	1997	1987	1997
Hospitals	\$18,766	\$26,448	\$15,047	\$21,714	\$3,719	\$ 4,734
Psych/SA specialty hospitals	10,088	10,746	8,869	9,761	1,218	985
Psych/SA specialty units of general hospitals <sup>a</sup>	5,812	13,371	4,133	10,758	1,697	2,613
Nonspecialty care in general hospitals	2,866	2,331	2,045	1,195	821	1,136
Independent practitioners	9,144	22,260	8,464	20,945	680	1,315
Psychiatrists	2,996	7,396	2,873	7,115	123	280
Nonpsychiatric physicians	2,252	4,718	1,782	3,973	470	745
Other professionals <sup>b</sup>	3,895	10,147	3,809	9,856	86	290
Multiservice mental health organizations <sup>c</sup>	4,378	12,135	3,944	11,066	435	1,069
Retail prescription drugs	2,776	9,076	2,771	9,038	6	38
Nursing homes	4,590	4,722	4,461	4,546	129	176
Specialty SA centers <sup>d</sup>	1,746	3,974	— <sup>e</sup>	— <sup>e</sup>	1,746	3,974
Residential treatment centers for children	1,092	2,807	1,068	2,718	25	89
Home health	59	428	59	414	1	14
Insurance administration	1,625	3,468	1,329	2,986	296	482
Specialty sector <sup>f</sup>	30,007	60,576	24,696	51,274	5,312	9,300
Nonspecialty sector <sup>f</sup>	12,543	21,275	11,118	19,166	1,427	2,109
Total MH/SA spending	44,177	85,317	37,140	73,427	7,036	11,890

**SOURCE:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration.

<sup>a</sup> Includes Veterans Affairs (VA) hospitals.

<sup>b</sup> Includes psychologists, social workers, counselors, and nurse practitioners.

<sup>c</sup> Comprises a variety of providers including community mental health centers, residential treatment facilities for the mentally ill, and partial care facilities. Some providers treat persons with SA problems.

<sup>d</sup> Includes methadone maintenance clinics and facilities that primarily serve persons with SA problems. Also includes facilities with units that offer specialized staff and treatment for SA problems. Assumes that all services provided are primarily for treatment of SA disorders.

<sup>e</sup> Not applicable.

<sup>f</sup> The specialty sector was defined as including psychiatric and substance abuse hospitals; psychiatric and substance abuse specialty units of general hospitals; psychiatrists; other MH/SA professionals; multiservice mental health organizations; specialty substance abuse centers; and residential treatment centers for children. The nonspecialty sector was defined as comprising nonspecialty units of general hospitals; nonpsychiatric physicians; nursing homes; home health agencies; and prescription drugs.

ward public payers than mental health expenditures were. Nearly 62 percent of expenditures on substance abuse treatment were funded by the public sector, compared with 55.2 percent for mental health. The federal government paid a larger share of the publicly funded substance abuse treatment (56.2 percent) in comparison with mental health treatment (50.9 percent).

■ **MH/SA as a share of total health spending.** MH/SA expenditures made up 7.8 percent of total personal health care and government public health spending in 1997 (Exhibit 3).<sup>11</sup> About one of every fourteen dollars spent on health care in U.S. hospitals went to treat MH/SA disorders. The amount for retail prescription drugs was one of every nine dollars; for physicians, only one of every eighteen dollars. The proportion of personal health and government public health spending going to substance abuse was relatively small (data not shown). Only 1.3 percent of hospital expenditures went for

**EXHIBIT 2****Estimated Mental Health And Substance Abuse (MH/SA) Spending, By Source Of Payment And Diagnosis, Millions Of Dollars, 1987 And 1997**

Source of payment	MH/SA		Mental health		Substance abuse	
	1987	1997	1987	1997	1987	1997
Private, total	\$20,723	\$37,451	\$17,224	\$32,906	\$3,498	\$ 4,545
Client out of pocket	8,168	14,301	7,345	13,049	823	1,252
Private insurance	10,886	20,823	8,542	17,948	2,344	2,875
Other private	1,669	2,326	1,337	1,909	332	417
Public, total	23,454	47,866	19,916	40,521	3,538	7,345
Medicare	3,297	9,985	2,972	9,071	325	914
Medicaid <sup>a</sup>	6,516	16,701	5,715	14,433	801	2,268
Other federal <sup>b</sup>	2,851	4,737	2,173	2,887	677	1,851
Other state/local	10,790	16,443	9,055	14,130	1,735	2,313
Federal total <sup>c</sup>	9,732	24,743	8,289	20,617	1,443	4,125
State/local total <sup>d</sup>	13,723	23,123	11,627	19,903	2,095	3,220
Total MH/SA spending	44,177	85,317	37,140	73,427	7,036	11,890

**SOURCE:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration.

<sup>a</sup> Includes both state and federal Medicaid expenditures.

<sup>b</sup> Includes Veterans Affairs, Department of Defense, and federal block grants.

<sup>c</sup> An alternative grouping of public funds, which includes Medicare, the federal contribution to Medicaid, and other federal programs including block grants.

<sup>d</sup> Includes the state-only portion of Medicaid and other state and local programs for MH/SA treatment.

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substance abuse treatment, 0.5 percent of physician spending, and less than 0.05 percent of retail prescription drug spending.

The significance of spending for MH/SA treatment to various payers varied from a low of 4.7 percent of Medicare spending to a high of 23.7 percent of health care spending by state and local governments (excluding Medicaid) (Exhibit 4). Substance abuse spending made up only 0.8 percent of total national private health insurance spending and 1.5 percent of total public spending (data not shown).

■ **Spending trends.** During 1987–1997 MH/SA spending grew by an average of 6.8 percent annually, from \$44.2 billion in 1987 to \$85.3 billion in 1997 (Exhibit 5). Adjusting for general price inflation, the growth rate was 3.7 percent overall, or an increase from \$44.2 billion to \$63.5 billion in real 1987 dollars.<sup>12</sup> Per capita spending for MH/SA treatment rose from \$182 per U.S. resident in 1987 to \$236 in 1997. The average annual growth rate was 7.1 percent for mental health and 5.4 percent for substance abuse; in inflation-adjusted dollars, 4.0 percent for mental health and 2.3 percent for substance abuse.

One important change over the time period was a shift away from hospital care. Hospital spending dropped from 42.5 percent of total MH/SA spending in 1987 to 31.0 percent in 1997. Spending for MH/SA hospitals had a particularly low growth rate, and spending for nonspecialty care units of general hospitals actually fell (Exhibit 5). The low growth rate in hospital spending reflects lower inpatient utilization. Psychiatric hospital days dropped by at least

**EXHIBIT 3****Growth In Mental Health And Substance Abuse (MH/SA) Spending In Relation To Personal Health Care And Government Public Health Spending, By Type Of Provider, 1997 And 1987–1997**

Provider type	Expenditures, 1997 (millions of dollars)			Average annual growth rate, 1987–1997	
	MH/SA NHA-equivalent	Personal health/government public health	Percent of personal health/government public health	MH/SA	Personal health/government public health
Hospitals <sup>a</sup>	\$26,448	\$ 371,061	7.1%	3.5%	6.7%
Community hospitals	13,293	331,251	4.0	6.2	7.2
Other	13,154	39,810	33.0	1.4	3.5
Physicians	12,113	217,628	5.6	8.7	7.6
Home health	428	32,318	1.3	21.8	17.1
Nursing homes	4,722	82,774	5.7	0.3	8.6
Retail prescription drugs	9,076	78,888	11.5	12.6	11.5
Other professionals <sup>b</sup>	8,145	61,916	13.2	10.2	10.6
Other personal health care and government public health activities <sup>c</sup>	17,913	68,399	26.2	11.0	12.2
Other nondurable medical products <sup>d</sup>	— <sup>e</sup>	29,984	— <sup>e</sup>	— <sup>e</sup>	5.1
Durable medical products		13,878			5.5
Dental		50,648			7.2
Insurance administration	3,333	49,998	6.6	8.0	10.4
Total	82,178	1,057,493	7.8	6.8	8.2

**SOURCES:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration; and Health Care Financing Administration, Office of the Actuary.

**NOTE:** Total MH/SA expenditures here differ from MH/SA expenditures reported in previous exhibits because MH/SA is adjusted to be compatible with the National Health Accounts (NHA).

<sup>a</sup> Includes psychiatric hospitals, Veterans Affairs (VA) hospitals, and other specialty hospitals.

<sup>b</sup> Covers services provided by nonphysician health professionals (such as chiropractors, optometrists, and other licensed medical practitioners) as well as miscellaneous health and allied services.

<sup>c</sup> Covers direct services provided by employers for health care for employees and government expenditures for care not specified by kind, or health care spending that is not elsewhere classified. This tends to include services offered at nonhealth facilities such as schools, military field stations, and community centers.

<sup>d</sup> Includes nonprescription drugs and medical sundries.

<sup>e</sup> Assumes no significant nondurable medical products for MH/SA other than drugs.

one-third over the period 1987–1995, even though admissions increased slightly and outpatient visits more than doubled.<sup>13</sup> The decline in inpatient care has been attributed to states' efforts to relocate MH/SA from state and county mental hospitals to the community—policies that have been ongoing since the 1950s—as well as to managed care. Changes in treatment philosophy and technology also contributed. Improvements in psychotropic drugs and use of assertive case management, for example, allowed for more community-based care.

The shift away from spending on hospital care was even more dramatic for substance abuse treatment. Hospital expenditures made up 52.9 percent of total substance abuse spending in 1987 but only 39.8 percent in 1997. Substance abuse spending in hospitals shifted to specialty substance abuse centers, which rose from 24.8 percent of total expenditures in 1987 to 33.4 percent in 1997.

**EXHIBIT 4****Growth In Mental Health And Substance Abuse (MH/SA) Spending In Relation To Personal Health Care And Government Public Health Spending, By Source Of Payment, 1997 And 1987–1997**

Source of payment	Expenditures, 1997 (millions of dollars)			Average annual growth rate, 1987–1997	
	MH/SA NHA-equivalent	Personal health/government public health	Percent of personal health/government public health	MH/SA	Personal health/government public health
Private, total	\$34,312	\$ 571,948	6.0%	6.1%	7.2%
Client out of pocket	13,004	187,551	6.9	5.6	4.9
Private insurance	19,580	348,021	5.6	6.9	8.6
Other private	1,728	36,376	4.7	2.8	7.6
Public, total	47,866	485,548	9.9	7.4	9.5
Medicare	9,985	214,571	4.7	11.7	10.0
Medicaid <sup>a</sup>	16,701	159,891	10.4	9.9	12.2
Other federal <sup>b</sup>	4,737	41,792	11.3	5.2	5.5
Other state/local	16,443	69,294	23.7	4.3	6.0
Total	82,178	1,057,493	7.8	6.8	8.2

**SOURCES:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration; and Health Care Financing Administration, Office of the Actuary.

**NOTE:** Total MH/SA expenditures differ from MH/SA expenditures reported in previous exhibits because MH/SA is adjusted to be compatible with the National Health Accounts (NHA).

<sup>a</sup> Includes both state and federal Medicaid expenditures.

<sup>b</sup> Includes Veterans Affairs, Department of Defense, and federal block grants.

Nursing home expenditures also fell from 10.4 percent of total MH/SA spending in 1987 to 5.5 percent in 1997. Underlying the spending drop was a decline in the number of nursing home residents with mental illness. This may be a result of federal legislation requiring that nursing home residents be screened for mental illness and receive an appropriate placement.<sup>14</sup>

Retail prescription drugs accounted for a growing share of mental health spending, rising from 7.5 percent in 1987 to 12.3 percent in 1997. Psychotropic medication use has been growing over time, in part because of the development of new medications. The number of psychotropic drug prescriptions written during physician's office visits increased from 44.5 million in 1987 to 73.2 million in 1997.<sup>15</sup>

The public sector's share of MH/SA spending increased from 53.1 percent in 1987 to 56.1 percent in 1997. The fastest-growing payer categories were Medicare and Medicaid (Exhibit 6). Although spending by state and local governments and other federal government programs grew, it did not grow as rapidly as Medicare and Medicaid spending did. The result was greater federal financing of MH/SA care and less direct state funding, a shift that has been ongoing since the 1960s.

The private insurance share of MH/SA spending remained relatively constant at about 24 percent between 1987 and 1997. Consum-

**EXHIBIT 5****Average Annual Growth Rate Of Spending For Mental Health And Substance Abuse (MH/SA) Treatment, By Type Of Provider And Diagnosis, 1987–1997**

Provider type	MH/SA	Mental health	Substance abuse
Hospitals	3.5%	3.7%	2.4%
Psych/SA specialty hospitals	0.6	1.0	-2.1
Psych/SA specialty units of general hospitals <sup>a</sup>	8.7	10.0	4.5
Nonspecialty care in general hospitals	-2.0	-5.2	3.3
Independent practitioners	9.3	9.5	6.8
Psychiatrists	9.5	9.5	8.6
Nonpsychiatric physicians	7.7	8.3	4.7
Other professionals <sup>b</sup>	10.0	10.0	12.9
Multiservice mental health organizations <sup>c</sup>	10.7	10.9	9.4
Retail prescription drugs	12.6	12.5	20.3
Nursing homes	0.3	0.2	3.2
Specialty substance abuse centers <sup>d</sup>	8.6	- <sup>e</sup>	8.6
Residential treatment centers for children	9.9	9.8	13.5
Home health	21.8	21.5	30.2
Insurance administration	7.9	8.4	5.0
Total	6.8	7.1	5.4
Gross domestic product (GDP) deflator	3.0	3.0	3.0

**SOURCE:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration.

<sup>a</sup> Includes Veterans Affairs (VA) hospitals.

<sup>b</sup> Includes psychologists, social workers, counselors, and nurse practitioners.

<sup>c</sup> Comprises a variety of providers including community mental health centers, residential treatment facilities for the mentally ill, and partial care facilities. Some providers treat persons with SA problems.

<sup>d</sup> Includes methadone maintenance clinics and facilities that primarily serve persons with SA problems. Also includes facilities with units that offer specialized staff and treatment for SA problems. Assumes that all services provided are primarily for treatment of SA disorders.

<sup>e</sup> Not applicable. Assumes that all specialty substance abuse center spending is for substance abuse.

ers' out-of-pocket spending fell slightly. This decrease is a trend that affected all of health care and has been attributed to the spread of managed care plans with their lower cost sharing, as well as better insurance coverage of prescription drugs.<sup>16</sup> We found that trends in out-of-pocket MH/SA expenditures vary by provider type (data not shown). For example, out-of-pocket spending made up 44.1 percent of psychiatrists' revenues in 1997, up from 39.9 percent in 1987. In contrast, out-of-pocket spending made up only 1.6 percent of total revenues to multiservice mental health organizations, down from 2.5 percent in 1987.

Trends by payer differed between mental health and substance abuse. The shift to public payers was larger for substance abuse, from 50.3 percent of total substance abuse spending in 1987 to 61.8 percent in 1997. Private insurance-funded substance abuse treatment grew particularly slowly: only 1.9 percent annually.

There has been some speculation that the growth of managed care would raise the proportion of care provided by the general-service sector—in particular, by primary care physicians. Our data do not

**EXHIBIT 6****Average Annual Growth Rate Of Spending For Mental Health And Substance Abuse (MH/SA) Treatment, By Source Of Payment And Diagnosis, 1987–1997**

Source of payment	MH/SA	Mental health	Substance abuse
Private, total	6.1%	6.7%	2.7%
Client out of pocket	5.8	5.9	4.3
Private insurance	6.7	7.7	2.1
Other private	3.4	3.6	2.3
Public, total	7.4	7.4	7.6
Medicare	11.7	11.8	10.9
Medicaid <sup>a</sup>	9.9	9.7	11.0
Other federal <sup>b</sup>	5.2	2.9	10.6
Other state/local	4.3	4.5	2.9
Federal total <sup>c</sup>	9.8	9.5	11.1
State/local total <sup>d</sup>	5.4	5.5	4.4
Total	6.8	7.1	5.4
Gross domestic product (GDP) deflator	3.0	3.0	3.0

**SOURCE:** CSAT/CMHS Spending Estimates Project, Substance Abuse and Mental Health Services Administration.

<sup>a</sup> Includes both state and federal Medicaid expenditures.

<sup>b</sup> Includes Veterans Affairs, Department of Defense, and federal block grants.

<sup>c</sup> An alternative grouping of public funds, which includes Medicare, the federal contribution to Medicaid, and other federal programs including block grants.

<sup>d</sup> Includes the state-only portion of Medicaid and other state and local programs for MH/SA treatment.

support this notion. The size of the specialty sector increased from 70.5 percent of total MH/SA spending in 1987 to 74.0 percent in 1997 (based on data in Exhibit 1). While spending on nonpsychiatric physicians grew by 7.7 percent, spending on psychiatrists grew by 9.5 percent over the period we studied (Exhibit 5).

■ **Trends in MH/SA and total health spending.** MH/SA NHA-equivalent spending grew by 6.8 percent from 1987 to 1997, while spending for personal health care/government public health grew by 8.2 percent (Exhibit 3). Many of the changes in MH/SA spending reflect changes occurring throughout the health care system. For example, hospital spending was the slowest-growing component of personal/government public health spending and second-slowest for MH/SA (after nursing homes). Hospital spending growth for MH/SA, however, was only about half of the personal/government public health hospital spending growth rate. This difference largely explains why overall MH/SA spending grew less rapidly than personal/government public health spending.

For both MH/SA and personal/government public health spending, growth in public payers exceeded that of private payers. (Exhibit 4). This reflects the fact that out-of-pocket spending grew relatively slowly for both areas than for the other payer categories, while Medicare and Medicaid grew relatively rapidly. Medicaid spending growth was spurred by rapid enrollment as well as some

*“The low growth in hospital MH/SA spending signals a need to monitor how the shift is affecting patients’ health.”*

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financing changes.<sup>17</sup> Rapid growth of home health care and nursing home spending, and to a lesser extent enrollment growth, may have fueled Medicare spending.<sup>18</sup>

MH/SA spending grew more slowly than personal health care and government public health spending in all payer categories except Medicare and out-of-pocket expenditures. Medicare benefits for MH/SA treatment expanded slightly over the time period.<sup>19</sup> The greater growth in out-of-pocket spending for mental health may reflect tighter management controls on use of MH/SA treatment relative to other diagnoses and the slight decrease in the generosity of MH/SA benefits.<sup>20</sup>

## Discussion And Policy Implications

A key finding of this study is that the growth rate for MH/SA care was significantly below that for all health care. The main underlying trend is that MH/SA hospital spending (and, to a lesser extent, nursing home spending) grew more slowly than did hospital spending for all conditions. Recent studies find that managed care can greatly reduce inpatient MH/SA utilization.<sup>21</sup> The slower growth could be evidence that managed care has a greater effect on MH/SA inpatient utilization than on inpatient utilization for other diagnoses, as some studies have shown.<sup>22</sup> It also might indicate that MH/SA treatment is better able to be managed in the community than other types of diseases are. In this regard, it is interesting to note that institutions that have traditionally focused on inpatient care, such as hospitals and residential treatment centers for children, are providing a growing amount of MH/SA outpatient care. Whatever the underlying cause, the low growth clearly signals a need to monitor how the shift is affecting patients’ health.

A trend that is affecting treatment of many diseases is rapidly changing technology, such as the development of new medications. Spending for MH/SA retail prescription drugs actually grew more rapidly than did overall prescription drug spending. The development of new and improved psychotropic drugs has revolutionized the treatment of MH/SA disorders, improving the lives of millions of Americans. At the same time, there have been some concerns about overuse, such as off-label use among children, and rising costs.<sup>23</sup> Employers and other third-party payers are increasingly focusing on ways to contain spending for medications—for example, by encouraging greater use of generics and less-expensive brands.

MH/SA spending is financed to a greater extent by the public sector than is the case for all health care. Furthermore, the proportion of spending funded by public payers, and the federal government portion, increased slightly over the 1987–1997 time period. The trend of relatively more MH/SA dollars coming from the public sector also occurred for health care as a whole and was due primarily to relatively low growth in out-of-pocket spending and high growth in Medicare and Medicaid spending. Recently, Medicaid and Medicare spending has slowed as a result of the Balanced Budget Act (BBA) of 1997, Medicare's fraud-and-abuse activities, a slowing of Medicaid enrollment, and Medicaid managed care, so we may not continue to see this shift in the future.<sup>24</sup>

In inflation-adjusted 1997 dollars, the United States spent \$176 per person on MH/SA treatment in 1987 and \$228 in 1997. Does this 30 percent increase in real dollars represent more people receiving treatment? Has the intensity of use by persons in treatment increased? How has the price of MH/SA treatment changed? The answers to these questions are critical to a fuller understanding of the policy implications of MH/SA spending trends.

**D**ATA THAT WOULD ALLOW one to investigate these questions are just starting to be collected. For example, the U.S. Department of Health and Human Services is tracking progress toward a number of MH/SA objectives as part of the Healthy People 2000 and 2010 initiatives. A recent progress report indicates that in 1993, 14.3 percent of adults sought help in coping with personal and emotional problems, up from 11.1 percent in 1985. The target for the year 2000 is 20 percent. Similarly, the Office of National Drug Control Policy (ONDCP) has established objectives for reducing the gap in substance abuse treatment. The ONDCP estimates that in 1996 approximately 4.4–5.3 million persons needed drug abuse treatment, while only about two million received it. Given the tremendous impact that MH/SA disorders have on persons and their communities, efforts such as these to track both access and spending are imperative.

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## NOTES

1. R.C. Kessler et al., "Lifetime and Twelve-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results from the National Comorbidity Survey," *Archives of General Psychiatry* (January 1994): 8–19.
2. C.J.L. Murray and A.D. Lopez, eds., *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected to 2020* (Cambridge, Mass.: Harvard School of Public Health, 1996).
3. D. McKusick et al., "Spending for Mental Health and Substance Abuse Treatment, 1996," *Health Affairs* (Sep/Oct 1998): 147–157; and T. Mark et al., "Contract Deliverable, Final Year 1 Report," submitted to Center for Substance Abuse Treatment and Center for Mental Health Statistics under Contract no. 270-96-0007, Project 1, Task 16 (Washington: MEDSTAT Group, February 1999). Method changes include better techniques for imputing and extrapolating missing data; allocation of spending in psychiatric and substance abuse specialty units of general hospitals to the specialty sector; and inclusion of insurance administration expenditures. For a detailed discussion of these changes, see T. Mark et al., "National Spending Estimates for Mental Health, Alcohol, and Other Drug Abuse Treatment, 1987–1997, Round-Two Report," submitted to Center for Substance Abuse Treatment and Center for Mental Health Statistics under Contract no. 270-96-0007 (Washington: MEDSTAT Group, 2000).
4. The IMHO provided information on multiservice mental health organizations, residential treatment centers for children, specialty psychiatric hospitals, and specialty psychiatric units of general hospitals.
5. The extrapolation methods used are described in detail in Mark et al., "National Spending Estimates."
6. The excluded codes were 290, 293, 294, 305.1, 315, 317, and 319.
7. The V codes included were V40.2, V40.3, V40.9, V61, V66.3, V67.3, V70.1, V70.2, and V71.0.
8. This study team created dementia treatment expenditures estimates for *Mental Health: A Report of the Surgeon General* (Washington: U.S. Government Printing Office, 1999), online at [www.surgeongeneral.gov](http://www.surgeongeneral.gov).
9. Some medications are prescribed for non-MH/SA disorders in addition to MH/SA disorders (for example, antidepressants are used for pain management); thus, this approach may overestimate some portion of MH/SA prescription drug spending.
10. T.A. Hodgson and A.J. Cohen, "Medical Care Expenditures for Major Diseases, 1995," *Health Care Financing Review* (forthcoming).
11. MH/SA expenditures in Exhibit 3 differ slightly from those in earlier exhibits

because they exclude some expenditures on providers classified by the Census Bureau as being in the social services industry. We exclude them here because they are excluded from the NHA. Only about 4 percent of total MH/SA spending fell outside the NHA definitions. To distinguish these estimates from those presented previously, they are called “MH/SA NHA-equivalent” expenditures.

12. The gross domestic product (GDP) price deflator was used to eliminate the effect of general price inflation.
13. Based on analysis of 1987 and 1995 data from the American Hospital Association’s annual survey of hospitals.
14. See Mark et al., “Contract Deliverable,” for a further discussion of this phenomenon.
15. Estimated using data from the National Ambulatory Medical Care Survey (NAMCS).
16. K. Levit et al., “National Health Expenditures in 1997: More Slow Growth,” *Health Affairs* (Nov/Dec 1998): 99–110.
17. Health Care Financing Administration, HCFA 2082 Report, Table I: Medicaid Recipients, Vendor, Medical Assistance, and Administrative Payments, online at [www.hcfa.gov/medicaid/2082-1.htm](http://www.hcfa.gov/medicaid/2082-1.htm) (21 January 1998).
18. K.R. Levit et al., “National Health Spending Trends in 1996,” *Health Affairs* (Jan/Feb 1998): 35–51.
19. M.L. Rosenbach and C.J. Ammering, “Trends in Medicare Part B Mental Health Utilization and Expenditures: 1987–1992,” *Health Care Financing Review* (Spring 1997): 19–42.
20. J.A. Buck and B. Umland, “Covering Mental Health and Substance Abuse,” *Health Affairs* (July/Aug 1997): 120–126.
21. K.L. Grazier and L.L. Eselius, “Mental Health Carve-Outs: Effects and Implications,” *Medical Care Research and Review* 56, no. 2 (1999): 37–59.
22. T.M. Wickizer and D. Lessler, “Effects of Utilization Management on Patterns of Hospital Care among Privately Insured Adult Patients,” *Medical Care* 36, no. 11 (1998): 1545–1554.
23. J.M. Zito et al., “Trends in the Prescribing of Psychotropic Medications to Preschoolers,” *Journal of the American Medical Association* (23 February 2000): 1025–1030.
24. K. Levit et al., “Health Spending in 1998: Signals of Change,” *Health Affairs* (Jan/Feb 2000): 124–132.